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According to the author, most grammarians have been writing stratificational grammars without knowing it because they have dealt with units that are related to one another, but not simply as a whole to its parts, or as a class to its members. The question, then, is not whether a grammar is stratified but whether it is explicitly stratified. This paper discusses the model o f language that is being developed by Sydney Lamb and H. A. Gleason, Jr. It is explicitly stratified and recognizes six strata (hypersememic, sememic, lexemic, morphemic, phonemic, and hypophonemic) grouped into three major structural components of two strata each: semology, grammar, and phonology respectively. Collectively, the strata are a system or code for relating communicative content at the "top" to vocal expression at the "bottom." Each stratum consists of an inventory of its characteristic units or "emes," and a set of tactic rules that specify how the emes combine with one another on that stratum. Finally, strata are connected to one another by realization rules, which describe how the emes of one stratum are linked to those of another. Any text, for example a sentence, exists on all the strata simultaneously. On each stratum the text will be a structure of emes ordered by the appropriate tactic rules, but on each stratum it will differ in structure. In effect, the strata furnish alternate ways o f looking at texts of a language. (DO)

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Stratificational Grammar

Henry Adams seems to have been at least partly right when, in *The Education of Henry Adams*, he postulated a law of acceleration in human life whereby scientific knowledge increases in complexity at an ever increasing rate. At least recent events in American linguistics lend support to the idea of such a law of acceleration. New linguistic theory has been following new linguistic theory with dizzy speed.

However, our recent progress in linguistics differs from Adams' law of acceleration in one respect. In 1905 Henry Adams thought that knowledge was increasing so rapidly that sometime between the 1930's and the 1950's it would reach a zenith from which it would be possible to predict the past and future course of human life as accurately as a mathematician could plot the path of a comet. Now there are those who believe that the perihelion of linguistic knowledge was reached in 1933 or in 1957, thus verifying Adams' prediction, but linguistic theorists as a whole have gone on grinding out one new theory after another as though in general linguistics as in General Electric, progress were our most important product.

In fact, change in linguistic theory is so rapid that nowadays you have to specify not only whose theory you are talking about, but what year's model you have in mind. Chomsky's *Syntactic Structures* of 1957 is already being referred to as "classical transformational theory," thus placing it in the same category as *Oedipus Rex* and the Phidian Jove. Acceleration could hardly be greater. Moreover there are signs that Chomsky's 1965 *Aspects of the Theory of Syntax* may soon be thought of as what the disc-jockeys call a "Golden Oldie," because extensive design changes are being proposed in the theory. Apparently we must get used to trading in our grammar along with our car each year for a newer model. But those who regret the Detroit syndrome in grammar can at least take comfort in the thought that it keeps the linguistic economy moving. In short there seems to be no immediate prospect of our running out of new theories because we have reached final linguistic truth. We can look forward to the law of acceleration's continuing to operate in language study for some time to come.

However, talk about acceleration and progress is misleading. It sounds too uniform, too well-directed, and much too harmonious. In fact, a better metaphor for the present state of linguistic theory would be that of a battle. Bloomfieldian and Tragerian Structuralism, which seemed firmly ensconced in the fortress of orthodoxy a scant ten years ago, have been besieged by the armies of Transformationalism. Tagmemic chaplains have set up their tents in the exotic bush. There are rumors of an invasion by Firthian foreigners. Dashing across the empty plains from a distant Danish horizon comes a new band, the troop of Stratificationalism. We need some modern Prudentius to describe this Glossomachia.

In this paper I propose to discuss stratificational theory, one of the newer entries in the lists, in a general way, there being in fact hardly any other way in which it can be discussed at present. These remarks might therefore be fittingly called the prolegomena to a paper on stratificational theory. The theory itself is far from fully developed and there is as yet no extensive grammar of any language written in stratificational terms. Nevertheless, James Sledd's trenchant observation that stratificational grammar "at the moment is like posterity—a gleam in its father's eye" is something of an exaggeration. Recent meetings of the Linguistic Society have included papers applying stratificational theory to various problems, and there is a small, but growing literature on the subject. Although still in a formative stage, stratificational theory has some interesting promises, and if it lives up to those promises, it will be worth our attention. I will return to the promises shortly; first I would like to consider what the theory is, and I will begin by distinguishing three senses in which the term stratificational may be used.

In the most general sense, stratificational theory describes a language as consisting of a limited number of strata or, to speak unmetaphorically, subsystems. The stratificational view thus contrasts with a grammar that tries to account for the whole of a language as a single system, with a single basic unit combined into complex structures. For example, an unstratified grammar might describe morphemes as composed directly of phonemes. A stratified description instead recognizes two different subsystems, each with its own characteristic unit, morpheme and phoneme. Morphemes are not composed of phonemes, but are indirectly connected to them through a relationship that can be called *realization*. The connection can be by way of either allomorphs or morphophonemes.

Although some Bloomfieldians (including Bloomfield himself) have at some times spoken as though they held an unstratified view, in fact no natural language can be described within such a limited framework. Consequently in practice linguistics have used some variety of stratified description, although often an inexplicit one. So it turns out that most grammars are at least partly or at least informally stratified. Their authors are thus in the position of Molière's *bourgeois gentilhomme*, who discovered to his delight that he had been speaking prose all his life without knowing it. Most grammarians have been writing stratificational grammars without knowing it because they have dealt with two or more kinds of units that are related to one another, but not simply as a whole to its parts, or as a class to its members. The question, then, is not whether a grammar is stratified but whether it is explicitly stratified. If the stratification is explicit, the following questions become relevant: How many strata does the grammar recognize? What is the internal structure of each stratum? How are the strata related to one another?

The foregoing questions lead us to the second sense in which the term stratificational grammar may be used: namely, to designate a model of language that is being developed chiefly by Sydney Lamb

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and H. A. Gleason, Jr. It is an explicitly stratified grammar that recognizes six strata grouped into three major structural components of two strata each:

Linguistic Strata

semology:
- hypersememic
- sememic

grammar:
- lexemic
- morphemic

phonology:
- phonemic
- hypophonemic

Collectively, the strata are a system or code for relating communicative content at the "top" to vocal expression at the "bottom."

Each stratum has its characteristic unit or eme. The top and the bottom strata are concerned with distinctive features—of meaning and of sound, respectively. Their emes are the minimal differences in the content and in the expression of a text. The distinctive features of sound, the hypophonemes in Lamb's terminology, are relatively easy to study because there are so few of them—only about twelve to fifteen in most languages. Sample hypophonemes are *plosion, spirancy, nasality, labiality,* and *unvoicing.* The distinctive features of meaning are much more numerous, and consequently much more difficult to study. They will presumably include items like *entity, process, animate, abstract, human, male,* and *female.* Although several starts have been made, not much has been accomplished for this part of language except for some severely limited areas, like kinship terminology, which has been studied if not exhaustively, at least exhaustingly, in the anthropological journals.

The sememic stratum deals in meaning-units of a kind sometimes called "idioms." The idioms or sememes may be realized on lower strata as phrases (*bull in a chinashop, put up with*), as complex words (*refer, housewife*), or as single morphemes (*ox, plural*). The characteristic of the sememe is that it cannot be divided into segments without losing some or all of its meaning, and it is therefore the smallest integral unit of meaning.

The lexemic stratum is the syntax of a language, and its eme is the smallest unit that is relevant to syntax. Lexemes are realized on the lower stratum as morphemes (*bull, put, with,* the plural-*s*) or as morpheme constructions (*housewife, chinashop, refer*) whose internal structure does not involve syntactic relations.

The Lambian morpheme and phoneme are units of the same size as the familiar neo-Bloomfieldian units, but they differ from their familiar namesakes in significant ways. Lamb's morpheme is approximately the equivalent of what has traditionally been called a morphemically conditioned allomorph such as *wife* and the *wive-* of *wives* or the noun plural *-s* and the *-en* of *oxen.* Lamb's phoneme shares some of the characteristics of the conventional morphophoneme. For example the *n* of *an,* because it occurs only before vowels and never before consonants, must be a different Lambian phoneme from the *n* of *than,* which has no such limitations on its distribution. Although these two *n*'s differ in phonemic distribution, they have the same realization and thus are identical on the hypophonemic stratum.

Each stratum consists of an inventory of its characteristic units or emes, and a set of tactic rules that specify how the emes combine with one another on that stratum. Finally, strata are connected to one another by realizational rules, which describe how the emes of one stratum are linked to those of another. For example these rules relate the morpheme *blue* to various lexemes above it such as *bluebird, sky-blue, blues* 'melancholia,' and simple *blue,* as well as to the phonemes below it, *b, l,* and *u.* The realizational rules come in two parts: the alternation pattern, which connects to a higher stratum, and the sign pattern, which leads to a lower stratum. At either end, the whole linguistic system is connected to nonlinguistic reality, to experience or thought at the top and to vocal-auditory sound at the bottom.

Any text, for example a sentence, exists on all the strata simultaneously. On each stratum, the text will be a structure of emes ordered by the appropriate tactic rules, but on each stratum it will have a different structure. In effect, the strata furnish alternate ways of looking at the texts of a language. On the semological strata the structure is that of a network in which a single unit may have multiple connections with other units, as in the Shakespearean text "Men have died from time to time, and worms have eaten them, but not for love" the same *men* have different connections to the dying

and the eating. Grammatically, the text is a tree of the familiar constituent structure sort. Phonologically, it is a chain or a string of elements. And it is all these things—network, tree, and string—at once. Or rather, a text is a complex set of relationships linking some bit of human experience, its meaning, to sound waves in the air. The grammarian describes these relationships as a series in interlocked structures.

Some important consequences follow from the notion that a single text has a number of different but simultaneous structures. One is that two texts may be identical or highly similar on one stratum, but may be significantly different on some other stratum. As a well-known and often cited example we can take the two texts *The sons raise meat* and *The sun's rays meet*. These two texts are distinct on the grammatical strata, but have overlapping phonological realizations. This is the relationship of homonymy, which we can define as the overlapping on some stratum of texts that are distinct on higher strata.

Bloomfieldian structuralism had no trouble in accounting for homonymy of the kind illustrated by *The sons raise meat* and *The sun's rays meet* because it had, in effect, separated phonology and grammar as distinct strata. But there are other kinds of homonymy, for example that illustrated by the three texts *his picture* 'he possesses it,' *his picture* 'he made it,' and *his picture* 'it is a picture of him.' These three texts are distinct semologically, but overlap grammatically. This kind of homonymy Bloomfieldianism was unable to cope with because it had not stratified the relevant portions of the system. Bloomfieldianism tried to deal with some semological matters as part of its morphemics and syntax. The rest it simply ignored as outside the proper concern of linguistics. The Bloomfieldians were using a ploy common to grammarians of all schools, who regularly conclude that whatever their particular theory cannot handle is outside the proper concern of linguistics or else that it is trivial and uninterestiing.

A properly stratified description will, however, have no trouble in handling any kind of homonymy nor its opposite, synonymy, the overlapping on some stratum of texts that are distinct on lower strata. Bloomfieldianism was able to account for synonyms of the kind *I will miss you* versus *I'll mishya*, which are phonologically different but gramatically alike. However, it had no easy way of showing that *his arrival*, *him to arrive*, and *he arrives* are also synonyms, being grammatically different realizations of the same semological structure.

Because each text exists on six different strata and because two texts can overlap on some strata but not on others, there is no need and indeed no room for process statements in the Lamb-Gleason stratification grammar, except as descriptions of historical change in a language. A process statement says that x becomes, or is changed into, or is replaced by y, but in a stratified grammar, x never disappears, is never changed into anything. X as a unit on one stratum may be realized as y on another stratum, but does not thereby disappear. Rather x remains as part of the structure of a text in its own stratal system, as unchanged and unchangeable as that breed of marble men and maidens with which Keat's Urn was overwrought.

In this regard, it should be recognized that there is nothing inherently wrong with process statements. They are one way of characterizing linguistic structures. The task of the grammarian is to describe that complex set of relationships linking sound and meaning, which has already been mentioned. To carry out his task he may create an imaginary time dimension along which he moves some of the units he is concerned with. He will then describe linguistic relationships as a process in which one thing becomes another. Or to carry out his task he may create an imaginary space dimension (or several imaginary space dimensions)in which he locates the units he is concerned with. He will then describe linguistic relationships as an arrangement of items relative to one another. Both process and arrangement descriptions are metaphors. There may be valid grounds for preferring one metaphor to the other, but these grounds cannot be that either metaphor represents language as it "really" is. Both are fictions. The choice between them is probably made most often on aesthetic grounds. I sometimes think that every child who comes into this world is born either a little Heraclitean or a little Parmenidean. If he is born a Heraclitean, he loves Becoming and grows into a Transformationalist. If he is born Parmenidean, he is enamored with Being and is realized on the adult stratum as Sydney Lamb.

The third sense of stratificational grammar that I would like to distinguish is really a system of notation, a device for making statements about linguistic relationships. If we want to be quite rigorous in our linguistic statements, and rigor is very much in fashion just now, we need some precise and unambiguous method of expressing ourselves. Here we have several options. We may use quasi-algebraic formulas, which are also very much in fashion just now although this sort of notional device is at least a hundred years old. One style for writing such formulas is the familiar $S \rightarrow NP + VP$, which may be read as "A sentence consists of a noun phrase followed by a verb phrase." That reading suggests a second option. We can always be rigorous in writing our grammar by using normal English in a rigorous way. Only such "normal" English will turn out not to be normal at all, but to be an abnormal and highly restricted variety of natural language. Natural language is unrigorous, ambiguous, and poetry-ridden. That is why it is so adaptable and so useful. The kind of quasi-normal English we can use in writing a rigorous grammar is a sub-language that needs to be interpreted in exactly the same way that a quasi-algebraic formula needs interpretation.

A rigorous stratificational grammar can be written in quasi-normal English or in quasi-algebraic formulas, or it can also be written in another way: with a special sort of diagram Sydney Lamb has invented. These drawings are quasi-circuitry diagrams consisting entirely of lines and nodes of various kinds. The diagrams are equivalent to formulas or "normal" English as a means of expressing grammatical relationships. And since diagrams, formulas, and "normal" English are equivalent ways of expressing a grammar, the choice among them depends on convenience and prejudice. The diagrams are useful graphic presentations of linguistic data, but they are not an indispensable part of the Lamb-Gleason model. However, they occupy such a prominent place in Lamb's *Outline of Stratificational Grammar* (Washington: Georgetown University Press, 1967) that the casual reader is likely to equate the grammar with the dia-

grams. And that would be a mistake. The diagram is only one out of several possible ways of making statements about the system of language and the structure of texts.

I have mentioned that stratificational grammar holds some promises that will make it worth our attention. Here it is possible only to mention a few of them. First, stratificational grammar claims not to be subject to the limitations that have been ascribed to simple phrase structure or "taxonomic" grammars, and hence it claims to offer a viable alternative to transformational grammar. As long as linguistic theory is in its present unsettled state, we must take care to examine all known approaches to the study of language so that we may arrive at the one that is most useful for our purposes. Second, stratificational grammar aims at accounting not merely for sentences, but also for texts of large extent: paragraphs, narratives, sonnets, five-act tragedies, epics, and the *Encyclopedia Britannica*, any text that has formal unity. At a time when many grammars seem unable to look beyond the sentence, it is instructive to recall that traditionally grammar has been closely linked with rhetoric and literature, studies that require a larger view. Third, stratificational grammar proposes not only to be a model for the abstract system lying behind the process of language, but to be a model for the very process itself. That is, Lamb is trying to develop an analogical model for the production and the comprehension of speech. Now these are very great and very ambitious claims. They smack of hubris, or at least of "chutzpah," but if those who are working on stratification grammar can substantiate any portion of these claims, the results will be well worth the effort, and we will have a new and valuable insight into the workings of human language.

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Guillaume Apollinaire: Poet of the Modern Theater

Guillaume Appollinaire is known primarily for his influence on the development of modern French poetry and for his interpretations and critiques of early twentieth-century art movements. His interest and and contributions to modern theatrical concepts have been largely neglected by scholars;[1] however, it is in his dramaturgy that one finds the main sources of modern French drama, both in its serious, traditional, or standard representation and in the so-called theater of the absurd.

Apollinaire's theatrical concepts are found chiefly in the "Préface" and "Prologue" of *Les Mamelles de Tirésias* and in his lecture, "L'Esprit nouveau et les Poètes."[2] Chronologically and aesthetically, this lecture holds a pivotal position in Apollinaire's dramaturgy, for it is an explanation of what he sought to do in *Les Mamelles de Tirésias* as well as an announcement of what he will undertake in *La Couleur du temps*.[3] Although there are more innovations in *Les Mamelles* which directly foreshadow the theater of the absurd than in *La Couleur*, which advocates a return to classical theater, both plays incorporate the main tenets of his dramaturgy and embody the essence of the "esprit nouveau."

For Apollinaire, the chief concern in the theater is the renewal and renovation of theatrical art, which he felt had been degraded by the proponents of realism, the technique of the "trompe-l'oeil," an attempt to render exact life-like reproductions. Through this attack on the photographic method, Apollinaire expresses a desire to represent life without reproducing it; this concept retains nature as its basis: "revenir à la nature même, mais sans l'imiter à la manière des photographes."[4] But, it is important to note that in his effort to break with the traditions of the past, Apollinaire does not demand destruction of the past: "je n'ai rien détruit . . . tentant de faire vivre les écoles nouvelles, mais non au détriment des écoles passées . . . j'ai voulu seulement ajouter de nouveaux domaines aux arts et aux lettres en général, sans méconnaitre aucunement les mérites des chefs-d'oeuvres véritables du passé ou du présent."[5] In "L'Esprit nouveau et les Poètes," he explains what he seeks to overcome and to accomplish. As telescoped by Adéma, the program is as follows:

> Echapper à l'imitation servile de l'antiquité.
> Eviter le désordre romantique.
> Repousser le wagnérisme échevelé.
> Rechercher des classiques l'esprit critique et le sens du devoir, tout en faisant la plus large place à l'imagination.[6]

Imagination has a key role. Not only does it permit the poet to transfigure the everyday so that a new perspective of reality may be perceived, but it also implies the author's complete freedom to create: "Son univers est sa pièce/ A l'intérieur de laquelle il est le dieu créateur/ Qui dispose à son gré."[7] In the creation of his own universe, the author must draw his characters from the universe: "des acteurs . . ./ Qui ne sont pas forcément extraits de l'humanité/ Mais de l'univers entier."[8] By using the universe as the basis of the theater, the unities of time and place are omitted in order to extend even farther the scope of the play. In *Les Mamelles* and *La Couleur*, the settings estab-

1. The few critics who have dealth with Apollinaire as a dramatist are Marcel Adéma, *Guillaume Apollinaire, le mal-aimé* (Paris, 1952); Cecily Mackworth, *Guillaume Apollinaire and the Cubist Life* (New York, 1963); Roch Grey, "Guillaume Apollinaire," *L'Esprit nouveau*, 24 (1924), 9ff.; Martin Esslin, *The Theater of the Absurd* (New York, 1961); Roger Shattuck, *The Banquet Years* (New York, 1961).

2. Delivered at the Théâtre du Vieux-Colombier, November 26, 1917, it was first published in *Le Mercure de France*, No. 491 (Dec. 1, 1918); see *L'Esprit nouveau et les Poètes*, ed. Marcel *Adéma* (Paris: Jacques Haumont, 1946).

3. Appollinaire only wrote two complete plays, *Les Mamelles de Tirésias* and *La Couleur du temps*. Although a third work, *Casanova*, published posthumously in 1952, exists, it is not included here because it was designed as a light opera, rather than a play, and because it was not in its final form at Apollinaire's death. *Les Mamelles de Tirésias* was first performed June 24, 1917, at the Maubel theater. There is a problem concerning the date of composition. The prologue and final scene were written early in 1917, but the bulk of the play seems to have been written much earlier. In the preface, Apollinaire states that most of this play was written in 1903, while in a letter to Pierre Varenne, the day following the first performance, he confirms the date of 1904. In spite of this contradictory evidence, it is known that Apollinaire revised the play constantly during the rehearsals in 1917; hence, the play, as we know it, may be considered as dating from 1917 although its conception is earlier. The preface was added in 1918 when the play was first published. *La Couleur du temps* was written in 1918 and performed on November 24, 1918; Apollinaire had died on November 9, while rehearsals were underway. It was first published in 1920.

4. "Préface" to *Les Mamelles de Tirésias* in *Oeuvres poétiques d'Apollinaire*, eds. Marcel Adéma and Michel Décaudin (Paris, 1959), p. 865. Unless otherwise indicated, all references are to this edition.

5. In a reply to André Billy's criticism of *Calligrammes;* see André Billy, *Apollinaire vivant* (Paris: La Sirène, 1923), p. 103.

6. Marcel Adéma, *Guillaume Apollinaire, le mal-aimé* (Paris, 1952), p. 243.

7. *Les Mamelles de Tirésias*, "Prologue," p. 882.

8. *Ibid.*, p. 881.